

Pharmacy NewsCapsule

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Thyroid Disease

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Complications from thyroid disease that are left untreated include osteoporosis, muscle weakness, infertility, and elevated cholesterol levels and subsequent heart diseases. Fortunately, there are sensitive lab tests that measure thyroid stimulating hormone(TSH). The sensitive TSH test clearly defines thyroid disease.

When should a TSH test be done? Certain risk groups like adolescents, women in reproductive years, women in menopause and all elderly are candidates for TSH screening. These risk groups are vulnerable due to the fact that symptoms they experience at this time of their life may mimic thyroid disease. For example, in adolescents they may become inattentive in school or hyperactive. Attention deficit may not be the cause, rather it could be an underlying thyroid condition. In the elderly, symptoms of fatigue, depression, forgetfulness, insomnia and appetite changes may be dismissed as natural aging process where in reality it may be a thyroid condition.

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Pain Management

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Is there another resurgence of pain management awareness? On January 1, 2001, the Joint Commission on Accreditation of Healthcare Organizations Pain Standards for 2001 went into effect, which may have subsequently increased awareness.

It is estimated that only 25% of Americans with pain receive proper treatment. Many barriers to adequate pain treatment still exist. There are individual and family barriers that are rooted in culture or beliefs. Physician barriers range from lack of expertise to fear of addiction or regulation. Hands-on caregiver barriers include lack of knowledge or empowerment to address the needs they feel their client deserves.

How do we overcome these barriers? Is it through communication, education, or partnership? It's probably all three and more. The questions that usually come up are how to get started and where to get help?

Organizations like the American Pain Foundation (www.painfoundation.org) have recently issued a "Pain Care Bill of Rights." This bill of rights helps patients understand their rights and can potentially be a resource that empowers them to ask questions and seek appropriate pain treatment.

Other organizations like the American Pain Society have issued practice guidelines for physicians. These guidelines can assist providers in establishing their own guidelines to overcome barriers related to fear of addiction and regulation.

The American Medical Directors Association has published clinical practice guidelines that address long term care pain treatment for chronic nonmalignant pain. In Wisconsin, the Medical

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New Drugs

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Brand Name	Generic Name	Use
Foradil	Formoterol	Powder for inhalation for long term treatment of asthma and prevention of bronchospasm.
Ziprasidone	Ziprasidone	Atypical Antipsychotic; see focus drug.
Nexium	Esomeprazole	GERD, gastric ulcer

Focus Drug of the Month

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Ziprasidone

Ziprasidone is an atypical antipsychotic medication for the treatment of schizophrenia. It is indicated for treating both positive and negative symptoms associated with the condition, including visual and auditory hallucinations, delusions, lack of motivation and social withdrawal.

The medication will be available in 20 mg, 40 mg, 60 mg and 80 mg capsules. The Initial dose of the medication is 20 mg twice a day with food. Increases in the drug dose should generally not occur at intervals of less than two days.

Common side effects of the medication include headache, nausea, constipation, drowsiness, and dyspepsia. Ziprasidone may increase the QT interval, which increases individual risks of dangerous irregular heartbeats and sudden death. Therefore, ziprasidone should not be used in individuals with cardiovascular illness or those taking other medications that prolong the QT interval.

Individuals who take this medication who are at risk of electrolyte disturbances, should have a baseline potassium and magnesium level and these levels should be periodically monitored while on ziprasidone.

Med Error Corner

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A recent meeting of the American Health Lawyers Association addressed medication errors. One of the common threads reported on the meeting was the concept of the health-care team. A summary comment was that within the team of the physician, pharmacist, drug manufacturer, payor, nurse and patient etc., a lawsuit may occur if any element of this team is broken.

These comments address the need for communication and collaboration. This message is similar to that coming from all types of organizations. The common thread is that, in an increasingly technologically advancing healthcare system, a team that knows the patient and communicates effectively will avoid the medical errors that occur.

Error reporting is a component of that communication. Sharing information on errors that were avoided, caught or, in some cases, those that actually occurred, provides a stepping stone to preventing future errors from occurring. Errors in most cases are a team or system error and should be dealt with in that fashion.

There are multiple safety programs occurring in the state. Urge providers, colleagues and patients to get involved in these efforts. A breakdown in the team may have caused the error and it will take the same team to address fixing the system to prevent future errors.

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Professional Practice vs. Licensed Facility Regulations

Occasionally requirements that are placed on licensed facilities and the requirements or rules that a licensed or certified professional operates under may conflict. For example, physicians under their license have a range of authority to delegate certain tasks to various individuals as they see fit. However, facilities may be subject to regulations that would prohibit various delegated physician tasks to occur under certain circumstances.

More specifically, theoretically a registered nurse may decide to delegate medication administration to a certified nurse assistant who is working in a nursing home. Under a nurse's license they may (depending on the circumstances) have the ability to delegate as such. However, under nursing home regulations only a practitioner, licensed nurse or an individual who is a Wisconsin Certified Medication Aide can administer medications to residents in nursing homes. This is a clear example of conflict between a licensed professional and a licensed facility.

Additionally, each type of licensed facility and each type of licensed or certified professional will have different regulations and boundaries. This makes sense as each professional has a different set of skills and each facility is providing different levels of services to different populations of consumers.

It is the responsibility of the licensed facility and professional to recognize each other's boundaries, limitations and regulations and to work within those boundaries, limitations and regulations.

Did you know?

- JCAHO recently revised its interpretation of medication security, from one of "strict" security of prescription medications to one of "reasonable" security. This directly affects medications that are available in crash carts as it is determined that plastic breakaway seals meet the definition of reasonable security.
- Surveys that measure adherence or compliance to medications have shown that individuals with chronic disease like diabetes exhibit the greatest compliance with their medications. Even in these groups however only 50% actually follow the instructions and are compliant with their medication.

Fosamax® (alendronate)

This medication has been available for a few years now to treat and prevent osteoporosis, and for treatment of Paget's disease. Recently this medication has become available in a once weekly tablet. Individuals who are being treated for osteoporosis would take one 70 mg tablet once a week. Individuals who are taking the medication to prevent osteoporosis would take one 35 mg tablet once a week.

This medication should be taken on an empty stomach with a full 6-8 oz glass of water. After the medication is taken the individual must remain upright, either sitting or standing for 30 minutes. Food or other beverages should also not be taken for at least 30 minutes after taking Fosamax®.

A common side effect of the drug is heartburn, but there is also the potential for ulcers. This is the reason the medication needs to be given on an empty stomach and the individual needs to remain upright for 30 minutes.

Case studies have been presented where elderly individuals with dementia who have received Fosamax® in the morning just prior to cares have become combative. Unfortunately, other means were used to treat the combativeness when the root cause was determined to be severe heartburn pain due to Fosamax®. It was determined that during cares the resident needed to lay down which caused the resident to suffer heartburn. The intervention could have been simply delaying cares until 30-60 minutes after Fosamax®.

If there are medications you would like featured here please send an email to Doug at engleda@dhfs.state.wi.us

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When should individuals who take thyroid medications have a TSH test? The American Association of Clinical Endocrinologists recommends an annual TSH test. However, ongoing monitoring for adverse effects, positive outcomes and potential interactions with thyroid medications is important. For example, iron can decrease absorption of thyroxine, which could lead to undertreatment of a thyroid condition.

It is estimated that over one half of all cases of thyroid disease are undiagnosed. Some of these cases are due to symptoms mistaken for other problems. A TSH test is simple and can rule out thyroid disease as the cause of these problems.

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College of Wisconsin has published resources available to assist facilities to change the pain management culture in healthcare facilities.

Pain management is a difficult process. There are no lab values, no defining tests one can use to determine how much medication to give. Treatment requires a trusting relationship, open communication, and education... a true team approach. Take advantage of the tools that are available to improve pain management and the quality of life of those individuals who receive pain treatments.

Consultant's Corner

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This section is basically a miscellaneous section that will show up each issue and will contain tidbits of information, most of which will come directly from your questions. If there is a topic you want more detailed information about, please drop me an email at engleda@dhfs.state.wi.us and I'll see what I can find.

1) What's the deal with grapefruit juice and drug interactions?

When a person takes a drug, that drug is usually metabolized or broken down in your body one way or another. These broken down parts of the drug can have no effect and are eliminated in sweat, urine or feces. In other cases, these broken down parts may have both good and bad effects on the individual. Medications can be broken down in many ways. One way is by various enzymes found in the body. One common group of enzymes you may have heard about is cytochrome P450 enzymes.

So what is the deal with grapefruit juice? Well grapefruit juice is an inhibitor of CYP3A4, a cytochrome P450 enzyme. What this means is that any medication that is broken down by this enzyme CYP3A4, will now stay in its original form much longer. This could be good or it could be bad. An example of a bad effect involves the medication Mevacor® (lovastatin). Mevacor® is broken down by CYP3A4. If it is routinely taken with grapefruit juice, Mevacor will not be broken down as readily and more of the drug would stay in your body longer. If this is not recognized individuals may run the risk of developing severe adverse effects from Mevacor®, namely rhabdomyolysis which is a severe breakdown of skeletal muscle that can lead to renal failure.

2) Mellaril® Warning?

In a previous newsletter a recent warning about Mellaril was documented. This information came from FDA required changes in labeling to the product Mellaril. The drug manufacturer sent changes in labeling and warning letters to physicians and pharmacists. Subsequently, some providers have taken measures regarding stopping the medication that appear not to be adequately thought out or properly communicated. It is possible that individuals on Mellaril may be at risk and may need the medication to be discontinued. It is appropriate for a plan to be in place. Residents, guardians and care staff should be aware of the plan, the expected outcomes and what to do when the outcomes may be different than expected.

References are available upon request.